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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 22917 | 7590 | 03/12/2004 | EXAMINER | |
| MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196 | | | GESESSE, TILAHUN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2684 | |
| DATE MAILED: 03/12/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/516,135 | PAN ET AL. | |
| | Examiner Tilahun B Gesesse | Art Unit 2684 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 07 January 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-11 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rinchiuso et al "Rinchiuso" in view of Chintz et al "Chintz".

As to claim 1,3,7, Rinchiuso discloses a method for transmission within a wireless communication system (100 of figure 1), the method comprising: receiving a plurality of uplink transmissions from a plurality of remote units (column 2 lines 21-27, column 3, lines 20-25, column 7, lines 17-25 and figure 1), determining a plurality of remote units (column 3 lines 18-34, column 7, lines 20-25), combining uplink transmissions of the plurality of uplink transmissions to produce a combined signals (column 3, lines 18-34 , column 7, lines 25-29and figure 6), and transmitting the combined signal to a base station to be broadcast via a downlink communication signal to the plurality of remote units (column 7 lines 29-40 and figure 6). Rinchiuso does not specifically disclose a subset of the plurality of remote units wherein the subset determined based on an energy of an uplink transmission of each remote from the plurality of remote units. However, Chintz discloses a subset of the plurality of remote units (group members A to D) wherein the subset determined based on an energy of an uplink transmission of each remote from the plurality of remote units (the group

members of A to D is determined base on inbound full rate or low rate links, in this cases group member D is full rate link. "high energy inbound link" (figure 5). The prior art "Rinchiuso and Chinitz" are with same field of endeavor "multicast communication". Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Rinchiuso and Chinitz , in order to solve the problem of unnecessary signaling between the remote and base station by utilizing the multicast communication technique.

As to claim 2, Rinchiuso discloses receiving the plurality of uplink transmissions from the plurality of remote units (113-117) comprises the of receiving a plurality of traffic channel transmissions form the plurality of remote units (column 3, lines 18-25).

As to claim 4,8 Rinchiuso discloses decoding uplink transmissions to produce a plurality of decoded transmissions (column 4 line 45-column 5 line 2) summing the plurality of decoded transmissions to produce a summed decoded transmission and encoding the summed decoded transmission (column 4 line 45-column 5, line 2 and figure 3).

As to claim 5, Rinchiuso discloses transmitting the combined signal to base station to be broadcast via the downlink communication signal comprises the step of transmitting the combined signal to the base station to be broadcast via downlink traffic channel to the plurality of remote units (column 3 , lines 18-34).

As to claim 6, Rinchiuso discloses a wireless communication system (100 of figure 1), the method comprising: receiving a plurality of uplink transmissions from a plurality of remote units (column 2 lines 21-27, column 3, lines 20-25, column 7, lines

17-25 and figure 1), determining a plurality of remote units (column 3 lines 18-34, column 7, lines 20-25), combining uplink transmissions of the plurality of uplink transmissions to produce a combined signals (column 3, lines 18-34 , column 7, lines 25-29and figure 6), and transmitting the combined signal to a base station to be broadcast via a downlink communication signal to the plurality of remote units (column 7 lines 29-40 and figure 6). Rinchiuso does not specifically disclose a subset of the plurality of remote units wherein the subset determined based on an energy of an uplink transmission of each remote from the plurality of remote units and multiple uplink voice transmissions from the first uplink voice transmission. However, Chintz discloses a subset of the plurality of remote units (group members A to D) wherein the subset determined based on an energy of an uplink transmission of each remote from the plurality of remote units (the group members of A to D is determined base on inbound full rate or low rate links, in this cases group member D is full rate link. " high energy inbound link" (figure 5), multiple uplink voice transmissions from the first uplink voice transmission (column 5, line 66-column 6, line 11) . The prior art "Rinchiuso and Chinitz" are with same field of endeavor "multicast communication" and Rinchiuso suggest that the fundamental channels are similar to existing CDMA traffic channels used for voice (column 6, lines 48-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Rinchiuso and Chinitz , in regrouping in subset and voice transmission , in order to solve the problem of unnecessary signaling between the remote and base station by utilizing the multicast communication technique.

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rinchiuso in view of Grube et al "Grube" (6005848).

As to claims 9-11, Rinchiuso discloses a method for transmission within a wireless communication system (100 of figure 1), the method comprising: receiving a plurality of uplink transmissions from a plurality of remote units (column 2 lines 21-27, column 3, lines 20-25, column 7, lines 17-25 and figure 1), determining a plurality of remote units (column 3 lines 18-34, column 7, lines 20-25), combining uplink transmissions of the plurality of uplink transmissions to produce a combined signals (column 3, lines 18-34 , column 7, lines 25-29and figure 6), and transmitting the combined signal to a base station to be broadcast via a downlink communication signal to the plurality of remote units (column 7 lines 29-40 and figure 6). Rinchiuso does not teach transponder. However, Grube, in similar field of endeavor, discloses transcoder (column 5, lines 1-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Rinchiuso and Grube in transcoding streams of data into a single steam in order to downlink to plurality of remote units from the base station.

Response to Arguments

Applicant's arguments filed 1.7.04 have been fully considered but they are not persuasive.

On page 3, third paragraph of response, applicant argued that Rinchiuso teach nothing of receiving uplink transmissions from multiple remote units and combining the uplink transmissions to produce a combined signal fro downlink transmission.

The examiner disagrees. Rinchiuso discloses receiving a plurality of uplink transmissions from a plurality of remote units (column 2 lines 21-27, column 3, lines 20-25, column 7, lines 17-25 and figure 1), determining a plurality of remote units (column 3 lines 18-34, column 7, lines 20-25), combining uplink transmissions of the plurality of uplink transmissions to produce a combined signals (column 3, lines 18-34 , column 7, lines 25-29and figure 6), and transmitting the combined signal to a base station to be broadcast via a downlink communication signal to the plurality of remote units (column 7 lines 29-40 and figure 6). In fact, Rinchiuso specifically illustrates at least one remote unit (113-117) that requested participation in the session "multicast".

On page 4, second paragraph of response, applicant argued that Chintz does not teach determining a subset of the multiple remote units based on energy of an uplink transmission of each remote unit of the multiple remote units.

The examiner disagrees. Chintz discloses determining a subset (107-109 and 104-106 of figure 1) of the multiple remote units based on energy of an uplink transmission of each remote unit of the multiple remote units (figure 2 and it's disclosure). Chintz groups the plurality of remote units in to subset monitoring outbound control channels based on power of the remote units.

On page 5, fifth paragraph of response , applicant argued that Rinchiuso and Chintz do not teach transcoder. However, applicant's argument is moot based on new rejection to claim 9.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rinchiuso et al (6,104,709) discloses plurality of remotes that wish to receive a multicast session monitor a multicast advertisement message on a system broadcast channel to determine a session to receive (abstract).

Heiskari et al (5,930,723) discloses establishing an extended group call in a mobile communication system (abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 703-308-5873. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TBG

Art Unit 2684

March 8, 2004



TILAHUN GESESS
PATENT EXAMINER